

# STANDARDS OF APPRENTICESHIP adopted by

# CENTRALIA FIRE DEPARTMENT APPRENTICESHIP COMMITTEE

(sponsor)

Skilled Occupational Objective(s): DOT Term

FIRE/MEDIC 373.364-014 7000 HOURS



# APPROVED BY Washington State Apprenticeship and Training Council REGISTERED WITH

# **Apprenticeship Section of Specialty Compliance Services Division**

Washington State Department Labor and Industries Post Office Box 44530 Olympia, Washington 98504-4530

# APPROVAL:

OCTOBER 18, 1985		
Initial Approval		
	By:	LAFRANK NEWELL
		Chairman of Council
JULY 19, 1996		
Addendum Amended		
	By:	PATRICK WOODS
		Secretary of Council
OCTOBER 18, 2002		·
Committee Amended		

# NOTE: THE FOLLOWING ADDENDUM SHALL BE SPECIFIED TO THE INDIVIDUAL JOINT APPRENTICESHIP AND TRAINING COMMITTEE AND ITS CRAFTS.

The following Standards for the development of the Centralia Fire/Medic apprentices, with supplements pertaining to the necessary work experience of the trade and a progressive wage scale will, when approved by and registered with the Registration Agency, govern the training of apprentices in this industry.

#### 1. GEOGRAPHICAL AREA COVERED:

The area covered by these Standards shall be the Centralia Fire Department in the City of Centralia, Lewis County.

# 2. <u>MINIMUM QUALIFICATIONS</u>:

Applicants shall meet the following minimum qualifications:

Age: Between 18 and 35 years of age.

Education: Must meet all the entrance requirements for firefighter as listed in the

Civil Service Rules for the City of Centralia Fire Department.

Physical: N/A
Testing: N/A
Other: N/A

# 3. <u>CONDUCT OF PROGRAM UNDER WASHINGTON EQUAL EMPLOYMENT OPPORTUNITY PLAN:</u>

Exempt by reason of selection through Civil Service Rules, as per WAC 296-04-480

# 4. TERM OF APPRENTICESHIP:

The term of apprenticeship shall not be less than 7000 hours of reasonably continuous employment.

# 5. <u>PROBATIONARY PERIOD:</u>

All apprentices employed in accordance with these Standards shall be subject to a probationary period not exceeding the first 12 months/2000 hours of the term of employment.

# 6. <u>RATIO OF APPRENTICES:</u>

For three (3) journeymen regularly employed, employer shall have one (1) apprentice and may have one (1) additional apprentice for each three (3) journeymen regularly employed thereafter.

# 7. WAGE <u>PROGRESSION:</u>

Step A 7 months (1166 hours)	77.50% of Journeyman Wage
Step B 7 months (1166 hours)	81.50% of Journeyman Wage
Step C 7 months (1167 hours)	85.50% of Journeyman Wage
Step D 7 months (1167 hours)	89.50% of Journeyman Wage
Step E 7 months (1167 hours)	93.00% of Journeyman Wage
Step F 7 months (1167 hours)	96.50% of Journeyman Wage

Note: Wages shall be established under the labor agreement between the city of Centralia and Local #451 of the I.A.F.F.

# GENERAL TRAINING OUTLINE FOR FIRE/MEDIC APPRENTICESHIP CERTIFICATE

#### 8. WORK PROCESSES:

When the JATC determines the Apprentice Firefighter has satisfactorily completed all requirements of the Apprenticeship program, the JATC will notify the Department and the National Committee that a Journeyman Firefighter Certificate is being issued to signify a professional level of competence.

# **STEP A** - 1166 Hours

#### A 1.0 General

A 1.1 The Firefighter shall demonstrate knowledge of the Standard Operating Procedures and organization and operations of the Fire Department.

# A 2.0 Safety

- A 2.1 The Firefighter shall demonstrate the correct procedures for being a back-up man for moving apparatus as specified by the authority having jurisdiction.
- A 2.2 The Firefighter shall demonstrate procedures for action required in removal of cave-in victims.
- A 2.3 The Firefighter shall demonstrate knowledge of procedures to be followed in the use of all equipment and apparatus that the Firefighter may be called upon to use.

#### A 3.0 Fire Hose

- A 3.1 The Firefighter, given the necessary equipment and operating as an individual and or member of a team, shall advance charged dry attack lines of two different sizes, both of which shall be 1-1/2 inch or larger, from a pumper:
  - a. into a structure.
  - b. up a ladder into an upper floor window.
  - c. down/up an inside stairway to an upper floor.
  - d. down/up an outside stairway to an upper floor.
  - e. to an upper floor by hoisting.
- A 3.2 The Firefighter shall demonstrate the taking of and connection of fire hose to a hydrant.
- A 3.3 The Firefighter shall demonstrate hose rolls as specified by the authority having jurisdiction.

- A 3.4 The Firefighter shall demonstrate the methods of hose laying as specified by the authority having jurisdiction.
- A 3.5 The Firefighter shall demonstrate methods of hose carries as specified by the authority having jurisdiction.
- A 3.6 The Firefighter shall demonstrate methods of coupling and uncoupling fire hose as specified by the authority having jurisdiction.
- A 3.7 The Firefighter shall demonstrate the methods for extending a hose line and replacing a burst section as specified by the authority having jurisdiction.
- A 3.8 The Firefighter shall demonstrate cleaning fire hose, couplings and nozzles; and inspecting fire hose for damage.
- A 3.9 The Firefighter, given an approved Fire Department pumper, shall identify the sizes, types, amounts, and use of hose carried on that pumper.
- A 3.10 The Firefighter, given an approved Fire Department pumper, shall identify the use of hose adapters and appliances carried on that pumper.
- A 3.11 The Firefighter shall demonstrate the methods and purposes of loading fire hose on fire apparatus as prescribed by the authority having jurisdiction.

#### A 4.0 Ladders

- A 4.1 The Firefighter shall identify all ladders and describe their uses as specified by the authority having jurisdiction.
- A 4.2 The Firefighter shall describe the types and features of ladder construction.
- A 4.3 The Firefighter shall demonstrate the proper procedure for inspection, care and maintenance of ladders as specified by the authority having jurisdiction.
- A 4.4 The Firefighter shall demonstrate the following carries as specified by the authority having jurisdiction.
  - a. One person carry
  - b. Two person carry
  - c. Three person carry
  - d. Four person carry
  - e. Five person carry
  - f. Six person carry
- A 4.5 The Firefighter, operating as an individual and as a team member, shall raise every type and size of ground ladder as specified by the authority having jurisdiction; and use three different raises for each ladder.

A 4.6 The Firefighter shall correctly climb, with and without equipment, the full length of every type of ground and aerial ladder as specified by the authority having jurisdiction.

# A 5.1 Operational Procedures of Pumper Company

- A 5.1 The Firefighter shall manipulate the nozzle so as to attack at least two live fires, including a Class A fire and a Class B fire.
- A 5.2 The Firefighter shall demonstrate how to properly open and close a nozzle.
- A 5.3 The Firefighter shall identify several <u>precautions</u> to be followed while advancing hose lines to a fire.
- A 5.4 The Firefighter shall explain the responsibilities of nozzleman and hydrantman as specified by the authority having jurisdiction.

# A 6.0 Operating Procedures of Ladder Company

A 6.1 The Firefighter shall explain the position responsibilities of individual ladder company personnel as specified by the authority having jurisdiction.

# A 7.0 Equipment and Appliance Handling

- A 7.1 The Firefighter shall demonstrate inspection and maintenance of fire hose, couplings, equipment and appliances carried on Department apparatus.
- A 7.2 The Firefighter, given an approved Fire Department apparatus, shall identify and explain the use of equipment and appliances carried on that apparatus to the authority having jurisdiction.

# A 8.0 Water Supplies

- A 8.1 The Firefighter shall demonstrate connecting hose line(s) to a Fire Department connection of an automatic sprinkler system.
- A 8.2 The Firefighter shall identify a Fire Department sprinkler and standpipe connection, and water motor arm.
- A 8.3 The Firefighter, when given the necessary equipment, shall effect the temporary stop of the flow of water from a sprinkler head.
- A 8.4 The Firefighter shall demonstrate knowledge of the value of automatic sprinklers in providing safety to life of occupants in a structure.

- A 8.5 The Firefighter shall determine fire hydrant usability by inspecting for:
  - a. Obstruction to use of hydrant.
  - b. Direction of hydrant outlets to suitability of use.
  - c. Mechanical above-ground damage
  - d. Condition of paint or rust and corrosion.
  - e. The full flow by fully opening and closing the hydrant.
  - f. Ability to drain.
- A 8.6 The Firefighter shall define a fire stream.
- A 8.7 The Firefighter, given a chart and table, shall identify and explain the approximate discharge capacities of various sizes of hose with layouts.

# A 9.0 Breathing Apparatus

- A 9.1 The Firefighter shall demonstrate donning breathing apparatus while wearing protective clothing as specified by the authority having jurisdiction.
- A 9.2 The Firefighter shall demonstrate the use, in a dense smoke environment, of all types of protective breathing apparatus used by the authority having jurisdiction.
- A 9.3 The Firefighter shall demonstrate that protective breathing apparatus is in a safe condition for immediate use.
- A 9.4 The Firefighter shall demonstrate proper procedure for cleaning and sanitizing protective breathing apparatus for future use as specified by the authority having jurisdiction.

# A 10.0 Forcible Entry

- A 10.1 The Firefighter shall identify and demonstrate the use of each type of forcible entry tool as specified by the authority having jurisdiction.
- A 10.2 The Firefighter shall demonstrate the method and procedure of properly cleaning, maintaining and inspecting each type of forcible entry tool as specified by the authority having jurisdiction.

#### A 11.0 Search and Rescue Procedures

- A 11.1 The Firefighter shall demonstrate the removal of injured persons from the immediate hazard by the use of carries, drags, and stretchers.
- A 11.2 The Firefighter shall demonstrate the procedure for searching for victims in burning smoke-filled buildings or other hostile environments.
- A 11.3 The Firefighter shall demonstrate and explain the uses of a life belt.

# A 12.0 Ventilation

- A 12.1 The Firefighter shall define the principles of ventilation and identify the advantages and effects of ventilation.
- A 12.2 The Firefighter shall identify the dangers present and precautions to be taken in performing ventilation.
- A 12.3 The Firefighter shall demonstrate opening various types of windows; from inside, outside, with, and without the use of Fire Department tools.
- A 12.4 The Firefighter shall demonstrate breaking windows and glass doors for ventilation without harm to himself or others.

# A 13.0 Fire Prevention

- A 13.1 The Firefighter shall identify the actions to be taken whenever fires are of a suspicious nature as specified by the authority having jurisdiction.
- A 13.2 The Firefighter shall demonstrate as an individual, the ability to recognize hazards and utilize proper inspection techniques while conducting building inspections.
- A 13.3 The Firefighter shall demonstrate the ability to follow departmental procedures for conducting and documenting inspections.

# A 14.0 Extinguisher

- A 14.1 The Firefighter shall identify fire extinguisher application in relation to fire type.
- A 14.2 The Firefighter, given a group of differing extinguisher, shall demonstrate the appropriate extinguisher for the various classes of fire.

Remarks:		
I certify that Firefighte has demonstrated com		ne above checked qualifications.
Date	Rank	Supervisor Signature
Date	Rank	JATC and/or Training Officer Signature

# **Step B** - 1166 Hours

# B 2.0 Ropes and Knots

- B 2.1 The Firefighter, when given the name, picture, or actual knot used by the Department, shall identify it and describe the purpose for which it would be used.
- B 2.2 The Firefighter, as an individual and as a member of a team, shall demonstrate folds and rolls of salvage covers as specified by the authority having jurisdiction.
- B 2.3 The Firefighter, as an individual and as a member of a team, shall demonstrate salvage cover throws as specified by the authority having jurisdiction.
- B 2.4 The Firefighter shall demonstrate the methods of inspection, cleaning, and maintaining salvage equipment.

# B 3.0 Fire Chemistry and Behavior

B 3.1 The Firefighter shall demonstrate the knowledge of fire behavior to include the chemistry of fire, flame spread, flashover, phases of burning, classes of fire, backdraft, and heat transfer.

# B 4.0 First Aid

- B 4.1 The Firefighter shall demonstrate a primary survey for life threatening injuries.
- B 4.2 The Firefighter shall demonstrate procedures for determining whether or not a victim has an open airway.
- B 4.3 The Firefighter shall demonstrate procedures for establishing an open airway in a non-breathing person.
- B 4.4 The Firefighter shall demonstrate the methods of resuscitation as specified by the authority having jurisdiction.
- B 4.5 The Firefighter shall demonstrate cardiopulmonary resuscitation.
- B 4.6 The Firefighter shall demonstrate techniques for controlling external bleeding.
- B 4.7 The Firefighter shall demonstrate techniques for auto extrication as specified by the authority having jurisdiction.
- B 4.8 The Firefighter shall become certified as an Emergency Medical Technician (Washington State) and EMT/Defib. within the first 12 months of apprenticeship.

# B 5.0 Records and Reports

B 5.1 The Firefighter shall demonstrate filling out daily <u>company</u> records and reports as specified by the authority having jurisdiction.

#### B 6.0 Electrical Hazards

- B 6.1 The Firefighter shall demonstrate the correct use of all safety equipment to be used in electrical emergencies as prescribed by the authority having jurisdiction.
- B 6.2 The Firefighter shall identify and explain how to handle electrical hazards encountered in fire situations and or hostile environments.
- B 6.3 The Firefighter shall demonstrate shutting off an electrical service to a building.

# B 7.0 Live Fire Experience

B 7.1 The Firefighter shall demonstrate methods of fire attack and control in Class A type fires as specified by the authority having jurisdiction.

# B 8.0 Response Districts

B 8.1 The Firefighter shall familiarize himself with the response area mapbook and will be tested on streets, block numbers, and hydrant locations as specified. (pages #1-13)

<u>B 9.0 General:</u> S.O.G's, Policy and Procedures

#### B 10.0 Safety

- B 10.1 The Firefighter shall identify and explain dangerous building conditions created by fire or disaster, and precautions to protect other Firefighters as prescribed by the authority having jurisdiction.
- B 10.2 The Firefighter shall demonstrate procedures for action when trapped disoriented in a fire and or hostile situation.

#### B 11.0 Fire Hose

- B 11.1 The Firefighter, given the necessary equipment and operating as an individual and as a member of a team, shall demonstrate the method of working from a ladder with a charged attack lines of two different sizes, both of which shall be 1 1/2 inch or larger.
- B 11.2 The Firefighter shall demonstrate methods of carrying hose into a building to connect to a standpipe and the methods of advancing a hose line from a standpipe as specified by authority having jurisdiction.

- B 11.3 The Firefighter shall demonstrate the method of preparing an apparatus for drafting as specified by the authority having jurisdiction.
- B 11.4 The Firefighter shall demonstrate conducting an annual service test for fire hose.

#### B 12.0 Ladders

- B 12.1 The Firefighters shall correctly climb the full length of every type of ground ladder as specified by the authority having jurisdiction and bring and "injured person" down the ladder.
- B 12.2 The Firefighter shall demonstrate the methods of working from ground ladders with tools and appliances as specified by the authority having jurisdiction.
- B 12.3 The Firefighter shall demonstrate a nationally accepted annual service test for ground ladders.
- B 12.4 The Firefighter, given the necessary equipment, shall demonstrate all ladder evolutions specified by the authority having jurisdiction.

#### B 13.0 Operation Procedures of Pumper Company

- B 13.1 The Firefighter, given the necessary equipment, shall demonstrate all hand lose lays specified by the authority having jurisdiction.
- B 13.2 The Firefighter shall demonstrate setting up a pump operation with two different sizes of hose, both of which will be 1-1/2 inch or larger as specified by the authority having jurisdiction.

# B 14.0 Operating Procedures of Ladder Company

B 14.1 The Firefighter shall demonstrate setting up an aerial ladder for operation as specified by the authority having jurisdiction.

Remarks:		
I certify that Firefighter		
,		ne above checked qualifications.
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Date	Rank	Supervisor Signature
Date	Rank	JATC and/or Tr. Officer Signature

# **Step C** - 1167 Hours

# C 1.0 Equipment and Appliance Handling

- C 1.1 The Firefighter, given an approved Fire Department Pumper, shall identify, select, and demonstrate the use of any nozzle carried on that pumper.
- C 1.2 The Firefighter, given equipment used by the authority having jurisdiction and operating as a member of a team, shall demonstrate extrication procedures of injured victim(s) for vehicular accidents.
- C 1.3 The Firefighter, given the necessary equipment for salvage operations by the authority having jurisdiction, shall demonstrate and explain their function.

# C 2.0 Water Supply

- C 2.1 The Firefighter shall define a water hammer and methods for its prevention.
- C 2.2 The Firefighter shall identify conditions that result in pressure losses in a hose line.
- C 2.3 The Firefighter shall demonstrate hydrant/pumper connection and calculate the necessary pump pressure desired for nozzle discharge as specified by the authority having jurisdiction.
- C 2.4 The Firefighter shall identify the following parts of a water distribution system:
  - a. Distributors
  - b. Primary Feeders
  - c. Secondary Feeders

# C 3.0 Breathing Apparatus

- C 3.1 The Firefighter shall name the various hazardous respiratory environments encountered in fire fighting.
- C 3.2 The Firefighter shall explain the physical requirements of the wearer, the limitations and duration factor of protective breathing apparatus, and the safety features of all types of protective breathing apparatus used and specified by the authority having jurisdiction.

#### C 4.0 Forcible Entry

C 4.1 The Firefighter shall identify materials and construction features of doors, windows, roofs, floors, and vertical barriers found in the area of the authority and demonstrate methods and procedures of forcible entry as specified by the authority having jurisdiction.

# C 5.0 Fire Prevention

- C 5.1 The Firefighter shall demonstrate a knowledge of common causes of fires and their prevention.
- C 5.2 The Firefighter shall identify and explain pre-fire survey procedures as specified by the authority having jurisdiction.
- C 5.3 The Firefighter shall demonstrate a knowledge of the fire inspection procedures used by the Fire Inspection Bureau.

# C 6.0 Ventilation

- C 6.1 The Firefighter, given a fire axe, shall demonstrate the ventilation of a roof and a floor as specified by the authority having jurisdiction.
- C 6.2 The Firefighter shall identify and explain the theory of a "back draft explosion".
- C 6.3 The Firefighter shall demonstrate how to determine the size of an opening for ventilation, how to locate these openings, and identify and explain the exposure and precautions to be taken during ventilation.
- C 6.4 The Firefighter shall demonstrate and explain ventilation using water fog.

# C 7.0 Ropes and Knots

- C 7.1 The Firefighter, using an approved knot as specified by the authority having jurisdiction, shall hoist any selected departmental equipment to a height of at least twenty (20) feet.
- C 7.2 The Firefighter shall demonstrate the method of inspecting, cleaning and maintaining rope as specified by the authority having jurisdiction.

# C 8.0 Salvage and Overhaul

- C 8.1 The Firefighter, given salvage equipment and operating as an individual and as a member of a team, shall demonstrate the construction and use of a water chute and water catchall.
- C 8.2 The Firefighter, given the necessary equipment, shall demonstrate the covering and closing of openings made during fire fighting operations.
- C 8.3 The Firefighter shall explain the methods of preserving evidence at fire scenes as specified by the authority having jurisdiction.

#### C 9.0 First Aid

- C 9.1 The Firefighter shall identify the signs of cardiac arrest.
- C 9.2 The Firefighter shall identify the types of external bleeding and the characteristics of each.
- C 9.3 The Firefighter shall identify the sources from which information might be gathered pertaining to the nature of an accident victim's injuries.
- C 9.4 The Firefighter shall identify the types of fractures and describe the differences.
- C 9.5 The Firefighter shall identify the general symptoms of possible fractures.
- C 9.6 The Firefighter, given a specified fracture, shall demonstrate the emergency care necessary to comfort the victim.
- C 9.7 The Firefighter shall identify the symptoms of traumatic shock.
- C 9.8 The Firefighter shall demonstrate how to treat traumatic shock.

# C 10.0 Records and Reports

C 10.1 The Firefighter shall demonstrate filling out incident reports for Fire and First Aid calls as specified by the authority having jurisdiction.

# C 11.0 Introduction to Fire Tactics (First year, sec.2q)

- C 11.1 The Firefighter shall demonstrate the general fire behavior expected within each building construction, including the spread of fire, and the safety of the building occupants and fire fighters.
- C 11.2 The Firefighter shall identify characteristics of various types of fire streams.

# C 12.0 Apparatus

C 12.1 The Firefighter shall demonstrate the checking and maintenance procedures of light duty apparatus as specified by the authority having jurisdiction.

#### C 13.0 Response District

C 13.1 The Firefighter shall identify the major areas of the response jurisdiction as specified by the authority having jurisdiction.

#### C 14.0 Fire Alarm Center

- C 14.1 The Firefighter shall demonstrate the correct procedure for a citizen to report a fire or other emergency.
- C 14.2 The Firefighter shall demonstrate receiving an alarm or report of an emergency and initiate proper action.
- C 14.3 The Firefighter shall describe the purpose and function of all alarm receiving instruments and personnel.
- C 14.4 The Firefighter shall explain traffic control devices installed in the fire station to facilitate the response of apparatus.
- C 14.5 The Firefighter shall demonstrate procedures required for receipt and processing of business and personal calls.

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		bove checked qualifications.
Date	Rank	Supervisor Signature
Date	Rank	JATC and/or Tr. Officer Signature

# **Step D** - 1167 Hours

# D 1.0 Public Relations

- D 1.1 The Firefighter shall describe the importance of Public Relations relative to the inspection programs of the Fire Department.
- D 1.2 The Firefighter shall explain the benefits derived from conducting and carrying out Public Relations in a consciences manner.

# D 2.0 Extinguishers

D 2.1 The Firefighter shall select the proper type of extinguisher and use that extinguisher to fight a live fire.

# D 3.0 Hazardous Materials

- D 3.1 The Firefighter shall complete the four hour course offered through Fire Service Training on Identifying and Recognizing Hazardous Materials.
- D 3.2 The Firefighter shall drill at least two hours a month on the subject of hazardous materials as required by law.
- D 3.3 The Firefighter shall drill at least two hours a month on the subject of hazardous materials as required by law.

# D 4.0 Departmental Operating Procedures

D 4.1 The Firefighter shall keep current, all policies and procedures of the fire department and may be tested on all of these to date.

# D 5.0 Sprinkler & Standpipe Operations

- D 5.1 The Firefighter shall identify all occupancies within the response area which are equipped with fire suppression systems.
- D 5.2 The Firefighter shall name the type of system in each occupancy.
- D 5.3 The Firefighter shall identify the F.D. connection location at each occupancy and name the location of the closest hydrant.

# D 6.0 Live Fire Experience

D 6.1 The Firefighter shall demonstrate the ability to set up for a foam operation at the scene of flammable liquids incident.

D 6.2 The Firefighter shall utilize foam (AFFF) in the extinguishment of a live flammable liquids fire, demonstrating the proper techniques of application.

#### D 7.0 Fire Tactics II See Section E.9.0

# D 8.0 Fire Hose

- D 8.1 The Firefighter, given the necessary equipment, shall demonstrate all hand hose lays specified by the authority having jurisdiction.
- D 8.2 The Firefighter, given the necessary equipment, shall describe the recoupling of hose, 1-1/2 or larger.
- D 8.3 The Firefighter shall demonstrate how to conduct an annual hose service test and record the final outcome as specified by the authority having jurisdiction.

# D 9.0 Ladders (Ground and Aerial)

- D 9.1 The Firefighter, operating as an individual and as a member of a team, shall raise every type and size of ground ladders as specified by the authority having jurisdiction using the different raises for each ladder.
- D 9.2 The Firefighter shall demonstrate the operating procedures of an aerial ladder as specified by the authority having jurisdiction.
- D 9.3 The Firefighter shall demonstrate an annual service test for an aerial ladder as specified by the authority having jurisdiction.

#### D 10.0 Operation Procedures of Pumper Company

- D 10.1 The Firefighter, given an approved pump, shall demonstrate conducting an annual service test and complete the necessary records and reports as specified by the authority having jurisdiction.
- D 10.2 The Firefighter shall explain the mechanical operation of a single stage and two stage pump, to include the priming mechanism, as specified by the authority having jurisdiction.
- D 10.3 The Firefighter shall demonstrate the checking and maintenance procedures of heavy duty apparatus as specified by the authority having jurisdiction.
- D 10.4 The Firefighter shall demonstrate driving and operation of heavy duty apparatus under normal and emergency conditions as specified by the authority having jurisdiction.

# D 11.0 Equipment and Appliance Handling

- D 11.1 The Firefighter, given the necessary tools, shall demonstrate the procedure to remove debris, rubble and other materials found at hostile environments.
- D 11.2 The Firefighter shall identify the types of nozzle streams and describe the application purpose of each.
- D 11.3 The Firefighter shall identify and explain foam making appliances and produce a foam stream from all types of foam making appliances used by the authority having jurisdiction.
- D 11.4 The Firefighter, given salvage equipment but excluding salvage covers, shall demonstrate the routing and removal of water from a structure.
- D 11.5 The Firefighter, given the necessary equipment, shall demonstrate the covering or closing of openings made during fire fighting operations.

# D 12.0 Water Supplies

- D 12.1 The Firefighter shall identify the following types of fire hydrants:
  - a. Wet-barrel fire hydrant
  - b. Dry-barrel fire hydrant
  - c. Flush fire hydrant
  - d. Suction Fire Hydrant
  - e. High Pressure hydrant and explain the operating nomenclature of each as specified by the authority having jurisdiction.
- D 12.2 The Firefighter, given a pitit tube and gauge, shall demonstrate its use and properly read and record various flow pressures.
- D 12.3 The Firefighter shall explain the following:
  - a. Static pressure
  - b. Residual pressure
- D 12.4 The Firefighter shall demonstrate knowledge of hydrant locations within the area of jurisdiction.

# D 13.0 Breathing Apparatus

- D 13.1 The Firefighter shall demonstrate the correct procedure for daily inspection and maintenance of the breathing apparatus used by the authority having jurisdiction.
- D 13.2 The Firefighter, given each type of breathing apparatus cylinder used by the authority having jurisdiction, shall demonstrate the correct procedure for recharging.

D 13.3 The Firefighter shall demonstrate the correct use of emergency procedures during breathing apparatus failure as specified by the authority having jurisdiction.

# D 14.0 Forcible Entry

D 14.1 The Firefighter shall demonstrate methods and procedures of forcible entry used in conjunction with ventilation as specified by the authority having jurisdiction.		
Remarks:		
I certify that Firefigh		bove checked qualifications.
Date	Rank	Supervisor Signature
Date	Rank	JATC and/or Tr. Officer Signature

# **Step E** - 1167 Hours

# E 1.0 Fire Prevention

- E 1.1 The Firefighter shall prepare diagrams to record the locations of items of concern during pre-fire planning operations.
- E 1.2 The Firefighter shall collect and record, in writing, information required for the purpose of preparing a pre-fire survey.
- E 1.3 The Firefighter shall identify common fire hazards and make recommendations for their correction.
- E 1.4 The Firefighter shall explain life safety programs for the home.

# E 2.0 Ventilation

- E 2.1 The Firefighter shall demonstrate the use of all different types of power equipment for ventilation purposes as used by the authority having jurisdiction.
- E 2.2 The Firefighter shall identify the different types of roofs and demonstrate methods used to ventilate each type and explain necessary precautions.
- E 2.3 The Firefighter shall demonstrate the removal of skylights, scuttle covers, and other covers on the roof tops and the reasons for such action.

# E 3.0 Extinguishers

- E 3.1 The Firefighter shall demonstrate knowledge of fire suppression agents used by the authority having jurisdiction.
- E 3.2 The Firefighter shall demonstrate a working knowledge of fire chemistry in relation to fire tactics.
- E 3.3 The Firefighters shall demonstrate maintenance and recharging of all departmental extinguishers as specified by the authority having jurisdiction.

# E 4.0 Ropes and Knots

- E 4.1 The Firefighter, when given a simulated firefighting or rescue task, shall select the appropriate size, strength, and length rope and demonstrate usage for the task.
- E 4.2 The Firefighter shall demonstrate the use of rope, using approved knots and hitches, to tie ladders, hose, and other equipment so as to secure them to immovable objects as specified by the authority having jurisdiction.

E 4.3 The Firefighter, given the proper rope, shall tie the proper knot on a person during a rescue situation.

# E 5.0 Salvage and Overhaul

- E 5.1 The Firefighter shall demonstrate shutting off gas services to a building.
- E 5.2 The Firefighter shall demonstrate assuming control of Fire Department operation for salvage and overhaul of a building and its contents in the absence of a fire officer.
- E 5.3 The Firefighter shall identify water and smoke damage potential to structure, contents, and other objects by excessive utilization of extinguishing agents.
- E 5.4 The Firefighter shall demonstrate determining the point of origin, possible cause and preservation of evidence in fires of a suspicious nature in accordance with authority having jurisdiction.
- E 5.5 The Firefighter shall explain methods and precautions in salvage and overhaul techniques of fire damaged structures.

#### E 6.0 Hazardous Materials

E 6.1 The Firefighter shall identify and explain the symbols used to designate hazardous materials and areas, and identify precautions that Firefighters are expected to observe and follow in such areas as specified by the authority having jurisdiction.

#### E 7.0 First Aid

- E 7.1 The Firefighter, given specified situations, shall identify what injuries might be suspected form observation in addition to those injuries that are obvious.
- E 7.2 The Firefighter, given a victim, shall conduct a secondary survey for other than life threatening injuries.
- E 7.3 The Firefighter shall identify the symptoms of internal bleeding.
- E 7.4 The Firefighter shall demonstrate caring for a person with known or suspected internal bleeding.
- E 7.5 The Firefighter shall list the classes of thermal burns according to severity and explain the physical characteristics of each class.
- E 7.6 The Firefighter, given a specified situation, shall demonstrate the emergency care procedure and explain the significance of each step.

- E 7.7 The Firefighter shall identify the emergency care for chemical burns, including chemical burns of the eyes.
- E 7.8 The Firefighter shall demonstrate and explain the anatomical process of breathing.
- E 7.9 The Firefighter shall demonstrate the heart-lung brain relationship as it affects life and explain what occurs when an airway obstruction is not corrected.
- E 7.10 The Firefighter shall demonstrate cardiopulmonary resuscitation employing the two man technique.
- E 7.11 The Firefighter shall demonstrate how to prepare a victim for emergency transportation by using standard available equipment and/or by improvising methods.

# E 8.0 Records and Reports

- E 8.1 The Firefighter shall demonstrate arrival and situation reports (short reports) over Fire Department radios in the manner specified by the authority having jurisdiction.
- E 8.2 The Firefighter shall demonstrate filling our Company Officer's daily, monthly, and semi-annual reports as specified by the authority having jurisdiction.

# E 9.0 Fire Tactics

- E 9.1 The Firefighter shall demonstrate the basic concepts of Fire Tactics as specified by the authority having jurisdiction.
- E 9.2 The Firefighter, given fire ground situations, shall select and identify the proper hose, adapters, and appliances necessary to control the situation.

# E 10.0 Response District

E 10.1 The Firefighter shall demonstrate response routes to area destinations within the area of jurisdiction.

#### E 11.0 Fire Alarm

- E 11.1 The Firefighter shall identify and demonstrate a knowledge of fire alarm systems within the area of jurisdiction.
- E 11.2 The Firefighter shall demonstrate proper use of radio equipment, both mobile and portable, as specified by the authority having jurisdiction.

- E 11.3 The Firefighter shall identify and explain fire location indicators (sub-panel0 provide to direct Firefighters to specific locations in protected public and/or private properties.
- E 11.4 The Firefighter shall demonstrate the ordering of multiple alarms and other calls for assistance from the alarm center and fire grounds as specified by the authority having jurisdiction.
- E 11.5 The Firefighter shall identify and explain all fire alarm signals, including multiple alarms, governing the movements of fire apparatus and the action to be taken upon the receipt of each signal.

# E 12.0 Sprinkler and Standpipe Operation

- E 12.1 The Firefighter, when given a sprinkler head in serviceable use, shall demonstrate how the automatic sprinkler head opens and releases water.
- E 12.2 The Firefighter shall identify the main drain value on an automatic sprinkler system.
- E 12.3 The Firefighter shall open and close a main drain valve on an automatic sprinkler system.
- E 12.4 The Firefighter shall identify the main control valve on an automatic sprinkler system.
- E 12.5 The Firefighter shall demonstrate knowledge of the value of automatic sprinklers in providing safety to life of occupants in a structure.
- E 12.6 The Firefighter shall demonstrate knowledge of the value of automatic sprinklers in providing safety to life of occupants in a structure.
- E 12.7 The Firefighter shall identify and explain the dangers of premature closure of sprinkler main control valve and of using fire hydrants to supply fire hose streams when the same water system is supplying the automatic sprinkler system.
- E 12.8 The Firefighter shall identify the difference between an automatic sprinkler system that affords complete coverage and a partial sprinkler system.
- E 12.9 The Firefighter shall identify different sources of water for supply to an automatic sprinkler system.
- E 12.10 The Firefighter shall identify the following:
  - a. Wet sprinkler system
  - b. Dry sprinkler system

- c. Deluge sprinkler system
- d. Pre-action
- E 12.11 The Firefighter, when given the tools and sprinkler heads, shall properly remove one head from the system and replace it with a head of the same type.
- E 12.12 The Firefighter, given an alarm value of an automatic sprinkler system, shall demonstrate the operation of the valve.
- E 12.13 A Firefighter, given various sprinkler heads, shall identify all of them correctly as to:
  - a. Temperature rating
  - b. Pendant or upright
  - c. Special types
- E 12.14 A Firefighter shall identify the Alarm test valve on an automatic sprinkler system.
- E 12.15 The Firefighter, given an automatic sprinkler system, shall operate the Alarm test valve in such a manner as to actually test the system.
- E 12.16 The Firefighter, given a velocity drain valve or ball drip valve on the Fire Department connection of an automatic sprinkler system shall demonstrate that the valve is operating and the pipe drained.
- E 12.17 The Firefighter, given a check valve on the Fire Department connection to an automatic sprinkler system, shall demonstrate the direction of flow of water through the valve.
- E 12.18 The Firefighter shall read and record the indicated pressures on all gauges provided on a standard Wet automatic sprinkler system and name each gauge.
- E 12.19 The Firefighter shall identify and explain the reliability of automatic sprinkler systems and shall identify reasons for unsatisfactory performance.
- E 12.20 The Firefighter, by inspection of an automatic sprinkler system in a building, shall identify and explain if obstructions to sprinkler heads are present and what is the required clearance for the sprinkler head for obstruction.

# E 13.0 Live Fire Experience

E 13.1 The Firefighter shall identify observable results that are obtained when proper application of a fire stream is accomplished.

E 13.2	The Firefighter shall demonstrate applying foam during fire attack and/or hostile situations as specified by the authority having jurisdiction.		
E 14.0	Fire Hose		
E 14.1		ecessary equipment, shall demonstrate the of all positions as specified by the authority	
Remarks:			
L certify t	hat Firefighter		
-		he above checked qualifications.	
Da	ate Rank	Supervisor Signature	
D	ate Rank	JATC and/or Tr. Officer Signature	

# **Step F** - 1167 Hours

# F 1.1 Operation Procedures of Pumper Company

F 1.1 The Firefighter, given the necessary equipment, shall demonstrate the responsibilities and actions of all positions as specified by the authority having jurisdiction.

# F 2.0 Operation Procedures of Ladder Company

- F 2.1 The Firefighter, given an approved aerial ladder, shall demonstrate driving and operation as specified by the authority having jurisdiction.
- F 2.2 The Firefighter shall demonstrate an annual service test of an aerial ladder and how to properly record the findings according to the authority having jurisdiction.

# F 3.0 Equipment and Appliance Handling

- F 3.1 The Firefighter shall construct a diagram to identify the types of fog nozzles, identify the major parts, and trace their water flow.
- F 3.2 The Firefighter, given a selection of nozzles and tips, shall identify their type, design, operation, nozzle pressure, and flow in GPM for proper operation.
- F 3.3 The Firefighter shall explain all different types of equipment for mechanical ventilation used by the authority having jurisdiction.

# F 4.0 Water Supplies

- F 4.1 The Firefighter shall identify and explain the various mental components of a modern water distribution system.
- F 4.2 The Firefighter, given a chart, table, size of openings, and velocity pressures, shall determine the quantity of water flowing from various openings.
- F 4.3 A Firefighter shall identify the pipe sizes used in water distribution systems for residential, business, and industrial districts.
- F 4.4 A Firefighter shall identify various causes of increased resistance or friction loss with water flow mains.

# F 5.0 Breathing Apparatus

F 5.1 The Firefighter shall demonstrate the operational functions of all types of protective breathing apparatus by the authority having jurisdiction.

F 5.2 The Firefighter shall demonstrate the principles of operations of the following types of protective breathing apparatus approved for fire fighting use.

#### F 6.0 Fire Prevention

- F 6.1 The Firefighter shall demonstrate the principal types of building construction as defined in the local building code.
- F 6.2 The Firefighter shall demonstrate the general fire behavior expected within each type of building construction, including the spread of fire and the safety of the building, occupants, and firefighters.
- F 6.3 The Firefighter shall identify the duties and responsibilities of fire investigators.
- F 6.4 The Firefighter shall identify the action to be taken under designated procedures whenever fire hazards of suspected fire hazards are encountered during inspections.

# F 7.0 Extinguishers

F 7.1 The Firefighter shall demonstrate that fire extinguishers in an inspected premises are of required type and rating, conform to fire prevention code requirements where applicable, and have been inspected and serviced within the required period.

# F 8.0 Ropes & Knots

F 8.1 The Firefighter shall demonstrate the use of rescue lines during fire attack and hostile rescue situations.

#### F 9.0 Salvage & Overhaul

F 9.1 The Firefighter shall demonstrate methods and procedures used to detect and extinguish hidden fires.

#### F 10.0 Hazardous Materials

- F 10.1 The Firefighter shall identify hazardous materials commonly found in manufacturing, commercial, residential, and public assembly occupancies.
- F 10.2 The Firefighter shall identify hazardous materials being transported through the area of jurisdiction.
- F 10.3 The Firefighter shall identify and explain local code requirements covering the storage and transportation of hazardous material.

F 10.4 The Firefighter shall demonstrate assuming command of a hazardous material emergency.

# F 11.0 Records and Reports

F 11.1 The Firefighter shall demonstrate, in writing, the filling out of a Company Officer daily, weekly, monthly, and yearly report as specified by the authority having jurisdiction.

#### F 12.0 Tactics

F 12.0 The Firefighter shall demonstrate assuming command of a fire ground operation.

# F 13.0 Response District

- F 13.1 The Firefighter shall demonstrate the inspection of standpipe systems for Fire Protection including visual inspection of hose (where provided), nozzles, hose outlet threads, and Fire Department connections.
- F 13.2 The Firefighter shall identify sprinkler connections in the area of jurisdiction.
- F 13.3 The Firefighter shall identify standpipe connections in the area of jurisdiction.
- F 13.4 The Firefighter shall explain local requirements for sprinkler and standpipe installations in the area of jurisdiction.

Remarks:		
I certify that Firefighthas demonstr		of the above checked qualifications.
Date	Rank	Supervisor Signature
Date	Rank	JATC and/or Tr. Officer Signature

# 9. RELATED/SUPPLEMENTAL INSTRUCTION:

- A. Each apprentice shall enroll in and attend classes in subjects related to this trade, as approved by the State Board for Community and Technical Colleges, for a minimum of 144 hours per year.
- B. The methods of related/supplemental training shall consist of one or more of the following:
  - (X) Supervised field trips
  - (X) Approved training seminars
  - (X) A combination of home study and approved correspondence courses
  - ( ) Technical college
  - ( ) Community College
  - ( ) Training trust
  - (X) Other: Washington State Fire Academy 240 hours; E.M.T. Certification 82 hours; 200 hours per year on shift training.
- C. Satisfactory progress must be maintained in related training classes. (See Section 10, Administrative/Disciplinary procedures.)
- D. Maintain E.M.T. Certification as required in the current collective bargaining agreement.
- E. All recruit fire/medic apprentices shall successfully complete the eight (8) week continuous day shift schedule before assignment to a permanent company.
- F. The apprenticeship Committee will accept only fire service-related courses for pervious credit.
- G. Three (3) hours of related training credit may be allowed for five-page report on  $8\frac{1}{2} \times 11$  paper, double spaced, to a maximum of 75 hours.

# SUGGESTED CURRICULUM FOR RELATED INSTRUCTION:

- A. Fundamentals of fire suppression
- B. Arson detection
- C. Elementary chemistry for firefighters
- D. Elementary physics for firefighters
- E. Mathematics for the fire service

- F. Fundamentals of fire protection
- G. Elementary fire service hydraulics
- H. Fundamentals of building construction
- I. Mechanical drawing
- J. Blueprint reading
- K. Uniform fire code
- L. Uniform building code
- M. Fire prevention inspection
- N. Prefire planning
- O. Fire behavior related to local hazards and conditions
- P. Application of extinguishing agents including water
- Q. Personnel rules and regulations
- R. Bargaining agreement including grievance procedures
- S. Local detection and extinguishing systems.
- T. Washington State Fire Service Training

# 10. <u>ADMINISTRATIVE/DISCIPLINARY PROCEDURES:</u>

#### PERFORMANCE STANDARDS

The training Officer and/or JATC shall periodically examine and evaluate the Apprentice at designated intervals stipulated by Department regulations.

NOTE: Always done prior to step increases:

- 1) The Apprentice shall achieve 70% or above to satisfactorily pass written and/or oral examinations.
- 2) The Apprentice shall achieve 70% or above to satisfactorily pass field and/or practical skill performance.
- 3) The Apprentice shall maintain a satisfactory knowledge and performance of past material and techniques throughout the various steps during Apprentice training.
- 4) The Journeyman Firefighter shall continue maintaining satisfactory performances after completing the Apprenticeship training, according to Department regulations.

#### APPRENTICESHIP FIREFIGHTER RESPONSIBILITIES

- 1) Maintain notebook of Minimum Standards Sheet and have each performance objective accepted, signed, dated, and remarks indicated by Officer or immediate supervisor when objective is satisfactorily met.
- 2) Develop and maintain a "workbook" with all information, statistics, notes, etc. leading up to knowledge required to reach objectives of each subject, also indicating where such information was obtained.
- 3) Keep such "workbook" available so that the Officer or immediate supervisor may review study progress of Firefighter. This could also be used by Officer or

- immediate supervisor for reference to direct questions to Apprentice as a method of determining knowledge level and progress.
- 4) Firefighter is responsible for daily record of progress and review by Officer or immediate supervisor. He is also responsible for obtaining approval signature of Officer or immediate supervisor.
- 5) Firefighter to turn in copy of progress sheet to Officer or immediate supervisor at end of each month for review and forwarding to Training Division.
- 6) Firefighter shall maintain master pages of progress report in his notebook for reference and continuing achievement.
- 7) Firefighter is responsible for study time and records of study subjects and time spent both on and off duty relative to the 144 hours of related instruction per suggested curriculum outline.
- 8) Reference Materials for Firefighter Objectives:
  - A. The question for the oral and written exams will be taken from these references. Consequently, it is <u>strongly recommended</u> that the Firefighter write out all answers and file them in his notebook. This will avoid looking up each reference twice; once to complete the objective, and a second time to prepare for the exam. Writing out all the answers does take time, but it assists in memory retention and provides a ready reference source for later.
  - B. The JATC references need periodic updating to remain current with new sources or new editions of old sources. Thus, if a Firefighter finds what he believes to be a better reference source, he should send a memo to the JATC Committee so that it can be reviewed and included, if appropriate. The memo should include:
    - 1. The objective number.
    - 2. The current reference.
    - 3. The proposed reference.
    - 4. Why it is believed the proposed reference is a better source. Also, there may be typographical errors in the reference list. If one is found, please send a memo to the JATC Committee using the above format.

#### OFFICER OR IMMEDIATE SUPERVISOR RESPONSIBILITIES

- 1) Determine that the Apprenticeship Firefighter completes his assignments and puts in study and/or performance time on subjects connected with the Apprenticeship Training program.
- Question the Apprenticeship Firefighter on subjects studied or have Firefighter demonstrate practical subjects monthly.
- 3) Assist the Apprenticeship Firefighter in any way possible and review Progress Report Record and sign after questions have been completed, or practical subjects have been reviewed.
- 4) Review the Progress Record at the end of each month and forward to the Training Division.

# TRAINING OFFICER AND/OR JATC RESPONSIBILITIES

- 1) Ensure that adequate supervision is provided to maintain control for Apprentice Firefighter to satisfactorily fulfill the minimum requirements.
- 2) To make available adequate material, facilities and equipment for demonstrating performance objectives.
- 3) The Training Officer and or JATC shall examine the work, drill and training records of the Apprentice monthly.

NOTE: If an Apprentice fails to progress satisfactorily, the Training Officer and JATC shall meet and discuss the circumstances. The JATC shall make appropriate recommendations to the Department, subject to the conditions of the Bargaining Contract, Civil Service Regulations, statutes or Departmental Regulations.

# 11. COMPOSITION OF COMMITTEE AND ALTERNATES:

The Apprenticeship Committee shall be composed of equal representation from Local #451 International Association of Fire Fighters, and Centralia Fire Department supervisors, representing their respective organizations and selected by the groups they represent.

# The Employer Representatives Shall Be:

Ray Denman, Chief (Secretary)

512 North Pearl

Centralia, WA 98531

Centralia, WA 98531

Centralia, WA 98531

Centralia, WA 98531

# The Employee Representatives Shall Be:

Greg Schwartz, Fire Chief (Chair)

Rick LeBoeuf

512 North Pearl

512 North Pearl

Centralia, WA 98531 Centralia, WA 98531

- 12. <u>SUBCOMMITTEE:</u> (None)
- 13. TRAINING DIRECTOR/COORDINATOR: (None)